

Translation Of Chamoulaud, FR 2768018

The present invention relates to a method for industrial realization of door mat to arrange and protect the horticultural plantations.

It also relates to the door mat obtained according to this process and the uses of the aforesaid door mat.

In the field of the field crop, the corn for example, the seedbeds, all the cultures sprinkled in drop by drop such as the strawberry plants it is known to use door mats of protection to avoid the fast evaporation of the ground and to regularize the temperature. These door mats moreover, prevent the growth of bad grasses, support precocity by simple heating of the ground.

These door mats in the beginning were made with rye straw or reeds. They are increasingly manufactured with artificial or synthetic fibers very light. Black plastic sheets of 20 with 50 µm are usually used. Shavings, straw, barks of wood are sometimes widespread between the cultures. Recently biodegradable papers were born in spite of their limited lifespan and their price higher than plastic film.

The extensive farming requires the deployment of the sheets of plastic or of biodegradable paper on the ground, handling, the maintenance in place gave place to devices adapted to these needs, objects of patents TESSIER FR.A.2.427.781 or CTAFR.A.1.464.007 and 1.500.104.

To maintain in place the insulating materials patent AGRIPLAST FR.A.1.437.333 describes a door mat made up of two plastic sheets between which is interposed an insulating material. This material can in particular be consisted by a plastic lattice and the air retained by the mesh's of the aforesaid lattice.

The insulating material is retained by fixing on its perimeter. In the same way patent DROENBEDARF EP 363.773 relates to a door mat made up of layers of organic and synthetic matter laid out one on the other dependent between them with wire.

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In the field of the floral art, the realization of floral solid masses, floral mosaics, floral decorations in general, in addition to the quoted characteristics cited concerning the field crop it is necessary to add to it the aspect aesthetic, paramount in this type of culture, which eliminates the use of black plastic film.

The use of chips, fibers, barks of wood, allows a varied aesthetic. These materials are excellent insulators but very light, they are easily moved, dispersed by the rain, the wind, the birds, the pets, so that gradually the ground is discovered leaving the place with bad grasses, the edges of the solid masses are not then more discernible. The intervention of the gardener becomes frequent then, the products spread out and/or dispersed must then be partially replaced, the cost price is consequently faded.

To solve these problems partly, the patent LUCIEN FR.A.1.457.370 relates to door mats light, opaque or translucent insensitive with the bad weather in particular with water for thermal protection and the shade of the greenhouses, of the frames. They are composed of fiber mattress not very sensitive to water, dependent between them, aiguilletées and impregnated with a hydrophobic polymerizable matter.

The fibers used, artificial or synthetic in this case are coated using polymerizable products to make them insensitive with water. Although they can be tinted the aesthetic aspect does not appear essential.

The recourse to stones avoids a very great dispersion, only the domestic animals are likely to destroy the harmony of the floral solid masses. However these very aesthetic heavy materials often are generally of bad insulators.

In fact, none of the above mentioned products can answer all qualities required. The possibility of carrying out compositions of various materials can in certain cases constitute an interesting solution. In the same way former art évoquée cannot solve the problems thus posed. The present invention

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proposes to primarily mitigate the above mentioned disadvantages in the field of the floral art although adaptable to the field crop.

These goals are reached thanks to the horticultural carpet of mulching for floral solid masses made up of material fragments stuck on a permeable fabric to water of the film type out of plastic not woven etiou microperforé translucent or of color, the aforementioned fabric being laid out on a film support waterproof on which the adhesive does not adhere.

Preferably the permeable fabric with water on which are stuck the material fragments either imputrescible or biodegradable is carried out using natural materials translucent or of colors such as fabrics, nets, papers, according to longevity espéréeetiou according to the legislation in force.

Advantageously the stuck material fragments are derivatives of wood such as fibers, chips, barks, natural or colored.

According to another characteristic the stuck material fragments are minerals such as stones, stones, natural or colored.

According to an alternative of realization the stuck material fragments are synthetic matter derivatives such as glasses, plastics, colored or not.

Advantageously the method for industrial realization of the horticultural carpets of mulching comprises the following stages:

a) selection of the material fragments as derived from wood, minerals, products synthetic according to their physical, mechanical characteristics aesthetic,

b) impregnation of the fragments selected using an adhesive and possibly coloring by impregnation of the aforesaid material fragments using a dye adapted to their nature, hoped longevity, the legislation in force.

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c) depositing on a plane surface and plain of a plastic film waterproof and on which the selected adhesive does not adhere, the aforementioned film is then covered with a permeable with water, imputrescible or biodegradable fabric.

d) impregnated spreading of materials of adhesive and dye on the fabric according to a thickness constant function of the nature of materials and of their granulometry,

e) drying and according to the nature of the adhesive chosen, activation by ventilation and/or heating,

f) conditioning of the carpet of mulching in plates or rollers for its transport after its separation of plastic film deposited on the plane surface and linked.

Preferably the stage b) is twinned at the stage d), the adhesive and the possible dye being projected or being pulverized during the spreading of materials on the fabric. Preferably also and before the stage c) the fabric is cut out during the realization of the carpet of mulching to allow the predetermined establishment of the plants forming a floral solid mass, then at the end of this stage, masks are set up at the forms and the right of cuttings in order to avoid the impregnated spreading of materials of adhesive and dye in the aforementioned cuttings.

Advantageously the selected adhesive is an adhesive based on water with rapid hardening with one or more components.

According to a crumb alternative in work of the process, the stage c) is removed, the stages b) etou d) consist in impregnating with adhesive and dye at the time of the spreading of the material fragments selected on a carpet of plants intended for floral solid masses ready to pose.

The materials used are according to their nature hydrophobic subjects such as glass, stones, plastics or sensitive to water as derived from wood. The adhesive based on water dried once is however

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insensitive with water so that the behavior of derived from wood on plastic film is not deteriorated by the rain.

Thus the horticultural carpet of mulching obtained using the process according to the invention can be used to carry out framings and edges of floral solid masses.

Another use consists in surrounding the floral compositions, decorations, mosaics by allowing the presetting of the plants the component. Other characteristics and advantages of the invention will arise from the description of a realization given by way of nonrestrictive example in reference to the annexed drawings in which:

=>figure 1 is a diagrammatic sight out of cut of a door mat according to the invention,

=> figure 2 is a diagrammatic sight in riding prospect for a door mat according to the invention used for floral decoration.

One shows on figure 1 according to a diagrammatic sight out of cut an example of realization of using door mat 1 of the wood 2 barks sorted beforehand according to their volume. These barks thus chosen are tinted with a dye 4 kind DISCOLOR (trade mark) to harmonize them with the floral solid masses over which door mat 1 will be spread out.

After air drying free the tinted wood barks will be impregnated of an adhesive 3 based on water the such adhesive emulsion JAVATEX (trade mark). The dyeing is not always necessary, depend on the required aesthetic aspect for the door mat. Moreover the dyeing can be mixed with the adhesive so that dyeing and joining are carried out in only one operation.

On a plane surface 5 a plastic film 6 of type AGLEX (trade mark) used for traditional mulching, is spread out, waterproof, on which, characteristic essential, the selected adhesive does not adhere.

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This film 6 is then covered with a fabric 7 of type veils, not woven, microporous, of polypropylene such as DALTEX (trade mark).

The barks of wood 2 tinted and impregnated with adhesive are laid out on fabric 7 uniformly distributed. Drying is carried out in broken down atmosphere. The door mat thus carried out is ready with employment. Other materials 2a, derived from wood such as fibers or chips could have composed the door mat. Minerals 2b such as stones, stones, could also have been used, in the same way synthetic matters, glasses or plastics. In fact all materials collables on fabric 7 and likely to present an aesthetic aspect by their natures, their forms, their colors, their diversities, can be appropriate.

On figure 2 one shows according to a diagrammatic sight in riding prospect an example for use of the door mat according to the invention for a floral decoration.

Before the establishment, by the horticulturist, of various decorations 10 or floral compositions on the space beforehand prepared and delimited by edges it is preferable to cut out fabric 7 according to sites' planned for the aforementioned decorations and other edges.

It is only after this operation that materials 2 impregnated of adhesive 3 will be laid out on the fabric delimiting framings 8, edges 9. According to a provision not represented on the drawing, fabric 7 can exceed edges 9 delimited by stuck materials, in order to be folded and inserted to ensure a better wind resistance.

For better protecting the plants, or to produce a particular aesthetic effect, it can be interesting to increase the number of materials on the periphery of framings 8 and edges 9.

In the absence of these prédecoupages it is possible to carry them out in situ, the delimitation being then less perceptible and the different aesthetic aspect.

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For large-sized floral solid masses, the door mat is carried out in juxtaposable bands. Thus the door mat carried out by the process according to the invention implements aesthetically fixed materials, which according to their nature, ensure a good thermal protection.

The horticultural carpet of mulching according to the invention is thus usable for the realization of floral solid masses, of given floral compositions but also by way of cover of carpet of flowers obtained according to patent CHAMOULAUDFR.A.91 11.122. It answers the fixed goals well.

The modifications likely to be made by the expert to the horticultural carpet, with its process describes above which, without deteriorating the original provisions of them, would be only of simple technical equivalents, also enter within the framework of present the invention. It in is the same with regard to the various uses of the aforesaid carpet horticultural.

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